

CLAIM AMENDMENTS

Claim 1 (withdrawn): An inorganic antibacterial agent containing high-valence silver, which are characterized by containing 2 to 6% by weight divalent silver, trivalent silver or tetravalent silver based on total weight of the antibacterial agents, wherein said high-valence silver is supported onto a solid carrier by an ion exchange reaction.

Claim 2 (withdrawn): The inorganic antibacterial agent containing high-valence silver, as recited in claim 1, wherein said solid carrier is selected from a group consisting of sodium zirconium-phosphate, titanium phosphate, tin phosphate and zeolite.

Claim 3 (withdrawn): The inorganic antibacterial agent containing high-valence silver, as recited in claim 2, wherein said zeolite is selected from a group consisting of A-type zeolite, X-type zeolite, and Y-type zeolite.

Claim 4 (withdrawn): The inorganic antibacterial agent containing high-valence silver, as recited in claim 1, further containing 3.7% by weight of said divalent silver, said trivalent silver or said tetravalent silver based on a total weight of said antibacterial agent.

Claim 5 (withdrawn): The inorganic antibacterial agent containing high-valence silver, as recited in claim 1, wherein an average particle diameter of said inorganic antibacterial agent is ranged from 1.0-10.0 μ m, preferably 1.0-2.0 μ m.

Claims 6-19 (canceled).

Claim 20 (new): A method for preparing an inorganic antibacterial agent containing trivalent silver, comprising the steps of:

adding a solid carrier, which is capable of ion exchange, into a solution containing high-valence silver, wherein a volume ratio between said solid carrier and said solution containing high-valence silver is between 1:6 and 1:10, wherein said solution containing high-valence silver is prepared by dissolving silver peroxide into persulphate or concentrated nitric acid to generate water solution containing bivalent silver, periodic acid solution containing trivalent silver, and silver acid solution containing tetravalent silver;

substantially stirring said solution to obtain a pulp formed solution for enabling an ion exchange reaction between said high-valence silver ion and the exchangeable ion of said solid carrier to yield a solid compound; and

filtering and drying said solid compound to ultimately obtain said inorganic antibacterial agent containing high valence silver.

Claim 21 (new): The method, as recited in claim 20, wherein said solid carrier is selected from a group consisting of sodium zirconium phosphate, titanium phosphate, tin phosphate and zeolite.

Claim 22 (new): The method, as recited in claim 20, wherein said ion exchange reaction between said high-valence silver and said solid carrier is reacted at a predetermined condition, wherein a pH value is ranged between 1 and 5, and a temperature ranged between 30 degrees Celsius and 80 degrees Celsius, a reacting time ranged between 2 hours to 8 hours, wherein said PH value is adjust by applying one of 20% NaOH and 20% KOH.

Claim 23 (new): The method, as recited in claim 21, wherein said ion exchange reaction between said high-valence silver and said solid carrier is reacted at a predetermined condition, wherein a pH value is ranged between 1 and 5, and a temperature ranged between 30 degrees Celsius and 80 degrees Celsius, a reacting time ranged between 2 hours to 8 hours, wherein said PH value is adjust by applying one of 20% NaOH and 20% KOH.

Claim 24 (new): The method, as recited in claim 20, wherein said filtering and drying step further comprises sub-steps for washing a filter cake until a pH value of said filter cake ranges between 5 and 6, and for drying said filter cake at a temperature between 110 degrees Celsius and 140 degrees Celsius, for a time period between 1 hour to 2 hours.

Claim 25 (new): The method, as recited in claim 22, wherein said filtering and drying step further comprises sub-steps for washing a filter cake until a pH value of said filter cake ranges between 5 and 6, and for drying said filter cake at a temperature between 110 degrees Celsius and 140 degrees Celsius, for a time period between 1 hour to 2 hours.

Claim 26 (new): The method, as recited in claim 23, wherein said filtering and drying step further comprises sub-steps for washing a filter cake until a pH value of said filter cake ranges between 5 and 6, and for drying said filter cake at a temperature between 110 degrees Celsius and 140 degrees Celsius, for a time period between 1 hour to 2 hours.

Claim 27 (new): The method, as recited in claim 20, further comprising a step for calcinating said solid compound between 800 degree Celsius and 1000 degree Celsius, for a time between 2 hours to 4 hours, and a step for grinding said solid compound by a gas flow pulverizer to obtain particles with a size of average diameter between 1.0 μ m to 10.0 μ m.

Claim 28 (new): The method, as recited in claim 23, further comprising a step for calcinating said solid compound between 800 degree Celsius and 1000 degree Celsius, for a time between 2 hours to 4 hours, and a step for grinding said solid compound by a gas flow pulverizer to obtain particles with a size of average diameter between 1.0 μ m to 10.0 μ m.

Claim 29 (new): The method, as recited in claim 26, further comprising a step for calcinating said solid compound between 800 degree Celsius and 1000 degree Celsius, for a time between 2 hours to 4 hours, and a step for grinding said solid compound by a gas flow pulverizer to obtain particles with a size of average diameter between 1.0 μ m to 10.0 μ m.